

ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

Sub: Physical Science

Science Class: 8 nin Worksheet Solution 32 FORCE AND PRESSURE/ PRESSURE IN Date: 08.06.20 Full Marks: 15

LIQUIDS Choose the Correct options:

1. What is any substance than can flow and take the shape of the container that holds it

a) pressure

Duration: 40 min

- b) fluid
- c) atmospheric pressure
- d) density
- 2. Fluids can also include ___ and ___.
 - a) solids and liquids
 - b) solids and gases
 - c) liquids and gases
 - d) liquids

3. In liquids, the volume stays the same no matter what shape the container is.

- a) True
- b) False

4. In gases, the volume does stay the same when placed in different containers

- a) True
- b) False

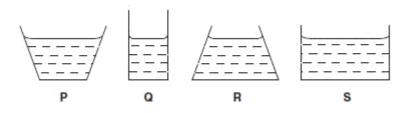
5. What is the amount of force per unit of area applied to an object's surface?

- a) fluid
- b) pressure
- c) atmospheric pressure
- d) density

6. What is the equation used to calculate pressure?

- a) pressure= force/mass
- b) pressure =mass/volume
- c) pressure=area/force
- d) pressure=force/area
- 7. What is the unit of measurement for pressure?
 - a) pascal
 - b) grams
 - c) milliters
 - d) meters
- 8. A fluid applies pressure perpendicular to all sides of an object in contact with the fluid.
 - a) True
 - b) False
- 9. Pressure decreases when the surface area over which a force is applied increases
 - a) True
 - b) False
- 10. Pressure increases when the surface area over which a force is applied increases.
 - a) True
 - b) False

11. The diagrams show, to the same scale, the vertical sections of a set of circular vessels, each containing the same depth of water.



Which one of the following statements is correct?

a) The water exerts the same pressure on the base of each vessel.

- b) The water exerts the same force on the base of each vessel.
- c) The water exerts the greatest pressure on the base of vessel S.
- d) The water exerts the greatest pressure on the base of vessel P.

12. In underwater pressure, as the depth increases, so does the pressure.

- a) True
- b) False

13. Underwater pressure also helps to explain why the wall of a dam is thicker at the bottom than the top because it applies more pressure at the bottom than at the top.

- a) True
- b) False

14. When comparing two or more fluids, the fluid that weighs more is considered a lot denser than the other fluid(s).

- a) True
- b) False

15. Pressure exerted by liquids at the bottom depends on

- a) height of the liquid column
- b) shape of the column
- c) shape of the container
- d) none